

CLAIMS

What Is Claimed Is:

- 5 1. An inkjet ink for printing through an inkjet printer onto a print media having an ink-receiving layer thereon that includes an alumina-based or a silica-based coating, said print media having a first pH, said inkjet ink having a second pH and comprising a vehicle and a colorant, said vehicle comprising at least one co-solvent and said colorant comprising at least one dye, said inkjet
10 ink further containing at least one anti-bronzing additive having a pKa that is above said first pH of said print media and less than said second pH of said ink, said anti-bronzing additive being present in an effective concentration to at least reduce bronzing of said dye on said print media.
- 15 2. The inkjet ink of Claim 1 wherein said anti-bronzing additive has a pKa within a range of 4 to 10 and is selected from the group consisting of amines, carboxylic acids, phosphates, phosphonates, organic buffers, and inorganic buffers.
- 20 3. The inkjet ink of Claim 2 wherein said amines are selected from the group consisting of alkylamines, ammonia, ethanolamine derivatives, pyridine derivatives, amino acids, wherein said carboxylic acids are mono- and polycarboxylic acids having 20 carbons or less, wherein said organic buffer is selected from the group consisting of (tris)hydroxymethylaminomethane, 4-mor-
25 pholinopropanesulfonic acid, 4-morpholinoethanesulfonic acid, and sodium acetate, wherein said inorganic buffer is selected from the group consisting of sodium bicarbonate and sodium dihydrogen phosphate, and wherein said organic phosphonate comprises 1-hydroxyethylene-1,1-diphosphonic acid.
- 30 4. The inkjet ink of Claim 1 wherein said anti-bronzing additive has a concentration in said inkjet ink within a range of about 0.75 to 30 wt%, based on the total ink composition.

5. The inkjet ink of Claim 4 wherein said concentration is within a range of about 0.75 to 15 wt%.

5 6. The inkjet ink of Claim 1 wherein said pKa of said bronzing additive is at least 0.5 unit above said pH of said print media.

7. The inkjet ink of Claim 1 wherein said colorant has at least one experimentally determined applicable pKa and wherein said pKa of said anti-
10 bronzing additive has a minimum value that is 1 unit below said experimentally determined applicable pKa of said colorant.

8. A method of reducing bronzing in an inkjet ink for printing through an inkjet printer onto a print media having an ink-receiving layer thereon that includes an alumina-based or a silica-based coating, said print media having a
15 first pH, said inkjet ink having a second pH and comprising a vehicle and a colorant, said vehicle comprising at least one co-solvent and said colorant comprising at least one dye, said method comprising adding to said inkjet ink an amount of at least one anti-bronzing additive having a pKa that is above said
20 first pH of said print media and less than said second pH of said ink, said amount being sufficient to at least reduce bronzing of said dye on said print media.

9. The method of Claim 8 wherein said anti-bronzing additive has a pKa
25 within a range of 4 to 10 and is selected from the group consisting of amines, carboxylic acids, organic buffers, and inorganic buffers.

10. The method of Claim 9 wherein said amines are selected from the group consisting of alkylamines, ammonia, ethanolamine derivatives, pyridine
30 derivatives, amino acids, wherein said carboxylic acids are mono- and polycarboxylic acids having 20 carbons or less, wherein said organic buffer is selected from the group consisting of (tris)hydroxymethylaminomethane, 4-mor-

pholinopropanesulfonic acid, 4-morpholinoethanesulfonic acid, and sodium acetate, wherein said inorganic buffer is selected from the group consisting of sodium bicarbonate and sodium dihydrogen phosphate, and wherein said organic phosphonate comprises 1-hydroxyethylene-1,1-diphosphonic acid.

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11. The method of Claim 8 wherein said anti-bronzing additive is added to a concentration in said inkjet ink within a range of about 0.75 to 30 wt%, based on the total ink composition.

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12. The method of Claim 11 wherein said concentration is within a range of about 0.75 to 15 wt%.

13. The method of Claim 8 wherein said pKa of said bronzing additive is at least 0.5 units above said pH of said print media.

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14. The method of Claim 8 wherein said colorant has at least one experimentally determined applicable pKa and wherein said pKa of said anti-bronzing additive has a minimum value that is 1 unit below said experimentally determined applicable pKa of said colorant.

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15. A combination of a print media and an inkjet ink composition, wherein said print media has an ink-receiving layer thereon that includes an alumina-based or a silica-based coating and has a first pH and wherein said inkjet ink composition is intended for printing from an inkjet printer onto said print media, has a second pH, and comprises a vehicle and a colorant, said vehicle comprising at least one co-solvent and said colorant comprising at least one dye, said inkjet ink further containing at least one anti-bronzing additive having a pKa that is above said first pH of said print media and less than said second pH of said ink, said anti-bronzing additive having an effective concentration to at least reduce bronzing of said dye on said print media.

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16. The combination of Claim 15 wherein said anti-bronzing additive has a pKa within a range of 4 to 10 and is selected from the group consisting of amines, carboxylic acids, organic buffers, and inorganic buffers.

5 17. The combination of Claim 16 wherein said amines are selected from the group consisting of alkylamines, ammonia, ethanolamine derivatives, pyridine derivatives, amino acids, wherein said carboxylic acids are mono- and polycarboxylic acids having 20 carbons or less, wherein said organic buffer is selected from the group consisting of (tris)-hydroxymethylaminomethane, 4-
10 morpholinopropanesulfonic acid, 4-morpholinoethanesulfonic acid, and sodium acetate, wherein said inorganic buffer is selected from the group consisting of sodium bicarbonate and sodium dihydrogen phosphate, and wherein said organic phosphonate comprises 1-hydroxyethylene-1,1-diphosphonic acid.

15 18. The combination of Claim 15 wherein said anti-bronzing additive has a concentration in said inkjet ink within a range of about 0.75 to 30 wt%, based on the total ink composition.

20 19. The combination of Claim 18 wherein said concentration is within a range of about 0.75 to 15 wt%.

20. The combination of Claim 15 wherein said pKa of said bronzing additive is at least 0.5 units above said pH of said print media.

25 21. The combination of Claim 15 wherein said colorant has at least one experimentally determined applicable pKa and wherein said pKa of said anti-bronzing additive has a minimum value that is 1 unit below said experimentally determined applicable pKa of said colorant.